Box 6

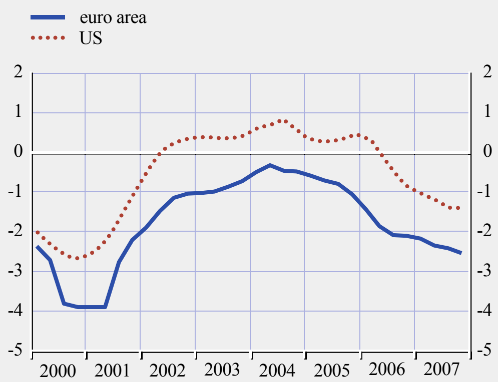
HOW VULNERABLE ARE EURO AREA AND US FIRMS TO FURTHER TENSIONS IN CREDIT MARKETS?

In assessing the potential impact that the strains in financial markets may have on euro area and US non-financial companies, firms' leverage and the cost of finance play a key role. To this end this box first examines some of the differences between euro area and US firms with regard to their reliance on bank and market-based sources of financing. It then goes on to assess how these differences together with higher financing costs may impact on the balance sheets of the enterprises.

To evaluate firms' overall need for finance, Chart A depicts the financing gap as a percentage of GDP (i.e. the net lending or net borrowing ratio) for euro area and US non-financial firms. As can be seen, since 2000 the financing gaps – a measure of how reliant

Chart A Financing gap of non-financial corporations in the euro area and the United States

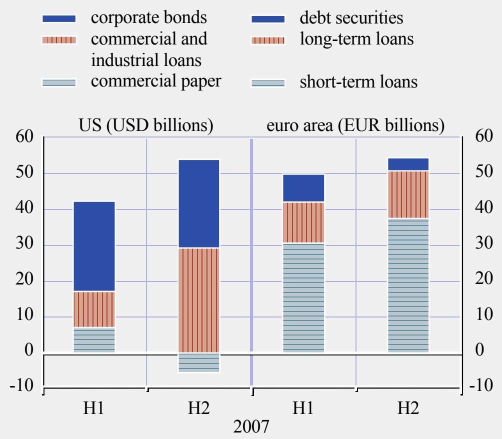
(% of GDP)



Sources: ECB and Federal Reserve Board.
Note: The financing gap is defined as the net lending (+) or net borrowing (-) of the sector in relation to whole economy GDP.

Chart B Selected components of net debt financing of non-financial corporations in the euro area and the United States

(monthly rate; end-of-period data, seasonally adjusted)



Sources: ECB and Federal Reserve System.

firms are on external funding sources – of the two economies have broadly followed the same pattern. It is, however, notable that the financing gap for euro area firms consistently hovered somewhat below the financing gap of US firms. Other measures, such as the debt-to-GDP ratio, confirm that euro area firms are, on average, more leveraged than their US counterparts.

One structural feature to be noted when comparing the two economic areas is that the functions of the financial systems differ, in particular with regard to sources of finance for companies. In principle, there are two debt financing sources available for firms; they can either borrow funds directly from lenders in financial markets (market-based finance) or they can approach financial intermediaries for funds. In the euro area, most of the financing is channelled through the banking system, whereas in the United States market-based finance is more prominent. For instance, in terms of outstanding amounts, bank loans made up around 85% of the total debt of euro area firms in 2006, whereas only 25% of the debts of US firms consisted of bank loans.

Keeping in mind that the euro area and US series are not entirely comparable, owing to different classifications, Chart B shows flow data on debt financing sources for the two economies in 2007. The chart suggests that both US and euro area firms' reliance on loans from financial institutions (in the United States defined as commercial and industrial loans) increased during the credit market turmoil. In the euro area only a small fraction of debt financing was channelled through debt securities issuance in the latter part of 2007.

The above-mentioned shifts in euro area and US firms' sources of financing are closely intertwined with financing costs. To this end, both bank and market-based financing costs are examined in some detail below.

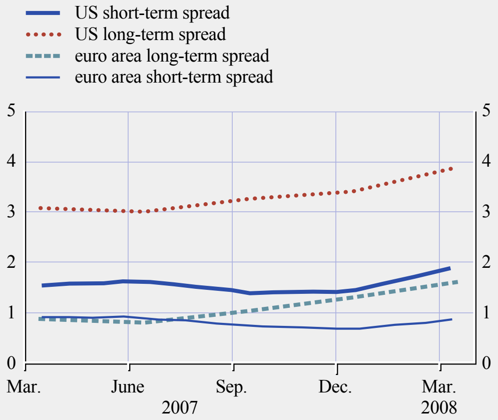
The simplest approach to take when examining cross-country differences in bank financing costs is to explore how the spreads between bank rates and risk-free rates (usually approximated by the interest rates offered on Treasury bills and government bonds) have developed. Chart C depicts the spreads on both short and long-term bank loans in the euro area and the United States since the first quarter of 2007, i.e. just before the turbulence erupted.[1] Two features can be inferred from the chart. First, both euro area and US longer-maturity spreads have increased sharply, by nearly 90 basis points, during the turmoil.[2] Second, the shorter-maturity bank spreads have remained broadly unchanged in the euro area, whereas similar bank spreads in the United States increased by some 40 basis points.

1 Given that interbank interest rates have diverged from the two central banks' policy rates, the chart makes use of three-month interbank rates in the calculation of the shorter-maturity spreads.

2 It should, however, be noted that long-term bank spreads may have been amplified by flight-to-safety shifts from risky assets to benchmark government bonds. See also Box 1 in ECB (2008), *Monthly Bulletin,* April.

Chart C Spreads on MFI loans to non-financial corporations in the euro area and the United States

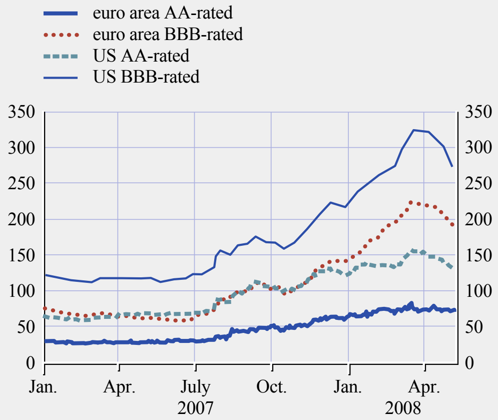
(percentage points)



Sources: Federal Reserve System and ECB.
Note: Short-term spreads are calculated using the three-month EURIBOR in the euro area and the three-month LIBOR in the United States. For long-term spreads the five-year and two-year bonds are used for the euro area and the United States respectively.

Chart D Option-adjusted corporate bond spreads in the euro area and the United States

(basis points, spreads over long-term government bonds)



Sources: Bloomberg and Merrill Lynch.

It should however be kept in mind that the spread widening in US bank rates has been offset by the loosening of the US monetary policy stance.

In the same vein, Chart D shows euro area and US option-adjusted corporate bond spreads. Both AA and BBB spreads are displayed in order to gauge how market-based financing costs have developed for firms according to their creditworthiness. As seen in the chart, US spreads increased by larger magnitudes compared with comparable spreads in the euro area. For instance, between January 2007 and early May 2008 US BBB spreads surged by 150 basis points compared with a 120 basis points increase in euro area BBB spreads.

To sum up, financing flows from financial institutions to US and euro area firms increased in the second part of 2007. Thus, non-financial corporations in the two economies seem to have favoured bank loans over other forms of debt financing during the turmoil. This development is consistent with the fact that cost of finance measures show that market-based debt financing has become relatively more expensive than bank debt financing in both economies. At the same time, when comparing financing costs (defined as loan and corporate bond yield developments relative to proxies for the risk-free rate), they have tightened more for US firms than for non-financial corporations in the euro area.

Going forward, continued tensions in financial markets would probably lead to an acceleration in corporate defaults in both economies given the expected deteriorating macroeconomic outlook and a probable slowdown in corporate profitability. Furthermore, if the trend towards higher market-based financing costs relative to bank financing costs continues, this will probably have a less marked impact on euro area corporations, given that they rely more on banks for their funding than US firms do.